6-2003

Transborder Industrialization and Singapore's Regionalization Strategy: Singapore's Industrial Parks in Indonesia and China - Boom, Bane or an Ongoing Game?

Caroline YEOH
Singapore Management University, carolineyeoh@smu.edu.sg

Charmaine Jialing CAI
Singapore Management University, charmaine.cai.2001@business.smu.edu.sg

Julian Ching Wei WEE
Singapore Management University, julian.wee.2001@business.smu.edu.sg

Topic Area: International Business

Submitted to
2003 Hawaii International Conference on Business, Third Annual Conference
June 18-21, 2003

**Transborder Industrialization & Singapore's Regionalization Strategy:
Singapore's Industrial Parks in Indonesia & China - Boom, Bane or an Ongoing Game?**

Caroline YEOH
(Email: carolineyeoh@smu.edu.sg)

Charmaine CAI Jialing

Julian WEE Ching Wei

School of Business
Singapore Management University
469 Bukit Timah Road
Singapore 259756

Tel: (65) 6822 0377
Fax: (65) 6822 0777

Transborder Industrialization & Singapore's Regionalization Strategy:
Singapore's Industrial Parks in Indonesia & China - Boom, Bane or an Ongoing Game?

Caroline YEOH
Singapore Management University

Charmaine CAI Jialing
Singapore Management University

Julian WEE Ching Wei
Singapore Management University

Abstract: Singapore's regionalization program is centred on a number of industrial township developments in China, India and several Southeast Asian countries. These townships are led by Singapore government-linked companies and are premised on the perception that Singapore's positive reputation with multinational corporations, for efficient industrial infrastructure and stable, corrupt-free administration, will give the townships a marketing advantage. Their progress is a litmus test of Singapore's ability to export its efficiency in industrial park development and management outside its borders. This paper discusses the origins and progress of the four largest and most advanced townships, two in Indonesia and two in China. It finds that initial optimism with which the flagship projects were unveiled has not been justified.

Key words: Regionalization – Transborder Industrialization - Industrial Parks - Singapore

Introduction

The development of industrial townships in China, India and across Southeast Asia was central to Regionalization 2000 (R2000), Singapore's government-led regionalization program commenced in the early 1990s. The township projects vary in location, scale, participants and progress. Comparability of the individual projects exists because of their common perceived advantage, as well as their shared design principles and organisation. The city state's positive reputation for infrastructure efficiency and corrupt-free administration was perceived as an advantage over other industrial parks that could be transplanted to locations where these attributes are uncertain, such as Indonesia (Server, 1996). Singapore's linkages to both western business, through the large population of MNCs in Singapore, and its ethnic affiliation to Chinese business networks that dominate Asian enterprise were thought to augment the marketing advantage (Redding, 1990; Yeung, 1997; Brown, 1998).

As well, Singapore operates within the dominant Asian political management style that favours a minimum of transparent, legalistic and accountable decision-making processes in preference to interpersonal relationships, networking and consensus behind closed doors[1]. This context enables individual investment privileges and protections for the parks to be negotiated, helped by Singapore's relative economic wealth within the region and reputation as an economic role model. The common design principle is self-containment with respect to the facilities required for industrial production and the focus on attracting foreign branch plants. As far as possible, the aim is to separate the townships from dependency on the surrounding administration and infrastructure, reinforcing the goal of creating privileged pockets of investment. The shared organisational context is the role of the Singapore government-linked companies as the primary facilitators and lead investors in the townships.

To provide the context to this paper, a brief account of Singapore's regionalization initiative, how it links to earlier development initiatives and how it relates to Singapore's current stage of development is presented. This is followed by case studies of the largest and most advanced of the township projects: Batamindo Industrial Park and Bintan Industrial Estate in Indonesia, and China-Singapore Suzhou Industrial Park and Wuxi-Singapore Industrial Park in China's Jiangsu province (Figure 1). The final section considers the implications of the experiences for the future of Singapore's regionalization program, including how this has been affected post-1997.

[1] The favored mechanisms include familiarization tours, formal and informal contacts amongst counterparts, the constitution of ad-hoc problem-solving committees, and visits by ministerial delegations that emphasize interpersonal relationships (Kumar and Siddique, 1994)

Regionalization and the Singapore Economy

By the mid-1980s, rising business costs made it an imperative for the country to move out of labor-intensive activities and become a regional centre of advanced technology (Rodan, 1989; Regnier, 1991). A new internationalization strategy was hatched that sought to strengthen local enterprise. An overseas direct investment program was launched in 1988 to accelerate access to new technology and foreign markets through joint ventures with overseas companies in Europe and North America. Over S$1.2 billion was invested; most of these investments, however, proved unsuccessful partly because of the weakness of the Singaporean partners (Kanai, 1993; Yeung, 1998). The government then began to look for expansion within the Asian region, encouraged by the liberalisation of foreign investment controls occurring in neighboring countries (Perry, 1991; Parsonage, 1992; Yeoh et al, 1992; Toh and Low, 1993; Ho and So, 1997; Grundy-Warr et al, 1999). In 1993, the change from internationalization to regionalization was endorsed by the Committee to Promote Enterprise Overseas (Singapore Ministry of Finance, 1993).

The regionalization strategy comprised state-led infrastructure projects and a range of incentives and regulatory innovations designed to assist private companies and individuals move overseas. First, senior politicians negotiate the institutional framework for the project that typically involves pursuit of special investment conditions and participation from government-linked agencies in the host location (Yeung, 1998). These inter-governmental arrangements were intended to result in privileged foreign investment zones but, as will be discussed below, inadvertently exposed the parks to particular dependencies and challenges. Second, Singapore government agencies and government-linked companies (GLCs) are the prime investors in the infrastructure and real estate development, typically through government-led consortia (Singapore Economic Development Board, 1994, 1995; Kwok, 1996). The prominence of government agencies and GLCs reflects the scale and long payback periods for infrastructure, which may make the investment unattractive to private companies alone. GLCs have the resources and experience required from their dominance of infrastructure provision in Singapore. As well, the government preference is to be an active participant in the projects, partly justifying its authoritarian political regime on the basis of its direct responsibility for the state's economic growth. The third role played by the state is in the marketing and promotion of the parks. The parks are heavily promoted to foreign multinationals in Singapore, as well as to Singapore companies seeking to internationalize their operations. The Singapore Economic Development Board (SEDB) takes on this role as part of its broader strategy for encouraging foreign MNCs to make Singapore their regional support and headquarters location. The ideal is that low value activities are relocated to one of Singapore's overseas parks alongside expansion of high value regional support activities in Singapore (Figure 2).

Numerous bilateral business councils involving Singapore and individual overseas governments are used to promote the parks to new foreign investors. Initial investor interest in the first Singapore-developed overseas industrial park - Batamindo Industrial Park (BIP) - further encouraged expanding overseas projects further into the region, especially to China, India, Philippines, Thailand and Vietnam (Tan, 1995). No precise objectives for the regionalization program have been made public against which its progress can be measured, but it is clear that the plans were ambitious. In 1994, it was announced that initially 2-3 percent of the republic's financial reserves would be directed to infrastructure projects in Asia, and this share could grow to 30-35 percent within 10-15 years (Kwok, 1996). This indicated the high confidence in the projects' viability as previously public investment had been only in blue chip stocks and bonds in industrialized economies. The scale of the four flagship projects considered below, if their development potential is realised, would exceed the total industrial and warehousing land area in Singapore.

The Indonesian Parks

The parks on the neighboring Riau islands of Batam and Bintan were the first of the government-linked projects to make progress. BIP was opened in 1992 with BIE opened in 1994. The parks are broadly identical, although Bintan has the potential to be a significantly larger project. Both were envisaged as self-contained environments with their communication and business linkages through Singapore rather than through Indonesia. BIP, for example, has its own power supply, water treatment plant, sewerage system, telecommunications facilities, commercial centre with a market, shops, a bank, restaurants, supermarkets, a mosque and a 24-hour medical centre. Factories of various sizes are built in advance for rent or purchase. BIP also has its own shipping and warehouse provider, offering freight transportation to and from Singapore. Labor recruited from outside Batam, on two-year contracts, reside in the park. Outside the estate, Batamindo Executive Village provides accommodation and recreation facilities for professional staff. BIE replicates BIP's design and organisational attributes with the additional feature of having its own port and direct ferry connection to Singapore.

Self-containment was partly a response to limited infrastructure and population on the islands. Prior to BIP, Batam remained sparsely populated. In 1989, total employment on Batam was 11,000, mainly concentrated in local services, tourism and oil-related firms using Batam as a service base (Batam

Industrial Development Authority, 1991). Tanjong Pinang, Bintan's only urban centre, and Riau's administrative centre, had a population of 200,000 in 1990 but little manufacturing employment. In Riau province as a whole, less than 10 percent of the population had a monthly expenditure of above US$20 in 1995 (Peachey et al., 1998). The parks act as investment enclaves bringing Singapore development standards to a low-income economy.

The projects on Batam and Bintan were joint ventures between government-linked companies from Singapore and an Indonesian business conglomerate. Singapore participated through two GLCs: Singapore Technologies Industrial Corporation (now SembCorp Industries) and a subsidiary of Jurong Town Corporation (JTC), Singapore's main industrial infrastructure builder. The Indonesian partner was the Salim Group, one of Indonesia's major conglomerates that, under the then Suharto regime, enjoyed close links to senior politicians and privileged access to investment projects in Batam and Bintan. Salim provided a guarantee of priority with respect to regulatory controls and government permissions, and took charge of labor recruitment. The Singapore contributors took control of the design, physical development and management of the estate. This division of responsibilities puts Singapore at the front of the marketing effort, to exploit its reputation for efficiency and links to foreign MNCs (Yeoh et al, 1992).

Batamindo Industrial Park

In the late 1980s, Singapore's economic planners identified the nearby Indonesian island of Batam as a possible solution to some of the city-state's pressing land and resource constraints. The conditions for this were the rapid recovery of the manufacturing sector, after the mid-decade recession, and the negotiation of a number of concessions in the Indonesian government's foreign investment regulations. The investment concessions made Batam an easier and more secure investment location for multinational capital than other parts of Indonesia. Foreign companies in Batam were exempted from the need to devolve a share of ownership to Indonesian partners and the island's duty free status was amended to facilitate a proportion of output to be exported to other parts of Indonesia. Foreign companies were allowed to manage industrial estates, providing the opportunity for the Singapore GLCs to set up the joint venture to develop and manage BIP.

Singapore's vision for Batam differed from the Indonesian ambition of creating a diversified modern metropolis comparable to Singapore (Regnier, 1991; Peachy et al., 1998). Singapore's economic planners envisaged Batam as a relocation point for low value assembly activity. Indonesia's compromise came due to the initial dearth of foreign investments in Batam, and the expectation that BIP would stimulate further investments under the larger growth triangle initiative to which it became linked (Perry, 1991; Yeoh, 1993).

BIP was the eighth industrial estate authorised by the Batam Industrial Development Authority, but the first to bring significant industrial activity to Batam outside the offshore oil servicing sector. The first tenants arrived in 1991, mainly branches of American, European and Japanese MNCs already operating in Singapore including AT&T, Philips, Sumitomo, Smith Corona, Seagate, Sanyo and Thomson. The provision of ready built factories for lease was an asset, allowing quick occupation and minimal commitment. As well, SEDB was active in encouraging leading MNCs in Singapore to use the park. SEDB controls access to a wide range of taxation concessions and regulatory permissions in Singapore, thus exerting great influence over investors who perceive potential business advantages by co-operating with SEDB (Perry, 1995). By June 2002, there were 88 companies and 66,000 workers in the Park (Table 1A). Table 1B shows BIP's tenant profile.

The initial area reserved for the park (500 hectares) has been fully committed. An industrial township has successfully been developed, but limitations need to be noted:

1. The scale and character of development has not influenced the restructuring of the Singapore economy. The initial promotion of BIP envisioned it making significant contributions to upgrading the Singapore economy through managing the outflow of MNC investment and stimulating Singapore's role as a regional headquarters. In practice, the park has become a Japanese electronics manufacturing enclave. In June 2002, 42 of the tenants were Japanese companies with Singapore the next largest concentration (25), while Europe (15) and the USA (7) had a comparatively low presence. This nationality profile has been pronounced from the outset. Batam has filled a niche for the development of Japanese production networks in Southeast Asia (Hatch and Yamamura, 1996). This raises two issues: the vulnerability to a withdrawal of Japanese investments and the limited linkages to the Singapore economy.

2. The development strategy envisaged a self-contained project with minimal dependency on the surrounding environment. In practice, the island's reputation as a boom economy has overwhelmed Batam. Almost half of the island's population, which has more than tripled since 1990, are new migrants living in illegal squatter housing, and 50,000 illegal houses are reportedly scattered throughout the island (The Straits Times, October 6, 2001). Attracted by their lower cost and

avoidance of accommodation responsibilities, around half of BIP's labor force now resides outside the park. This external labor supply has, however, introduced to the park the tensions and social problems of squatter settlements. The challenge is to maintain the investment value of BIP, without a shift of resources to meet the needs of the local community.

3. The park's competitiveness has been eroded with the mushrooming of other industrial parks within close proximity. Competitor parks, backed by prominent Indonesian politicians, are rapidly developing to match BIP standards. Panbil Industrial Park, for instance, is located directly opposite BIP, and offers similar factories at competitive rentals. The premium placed on the park's one-stop support service and self-sufficient operating environment is increasingly called into question.

4. Ownership changes at BIP have also brought about uncertainties. Privileged access to senior politicians and policy-makers has been diminished with the `apparent' change of ownership in BIP (and BIE). The Indonesian Bank Restructuring Agency has reportedly offered to sell the Salim Group's stakes in all the Riau projects – estimated to be worth S$500 million – in a packaged deal (The Business Times, August 28, 2001). Further restructuring have taken place, with the three main stakeholders now being SCI, Ascendas (a JTC subsidiary) and the Indonesian government. The park's reputation as an investment haven has not been left unscathed by political developments in the aftermath of the Asian financial crisis, and more recently, the September 11 attacks in the United States. BIDA reported that only 63 new projects worth US$325 million were attracted to the island between January and August 2001.

Bintan Industrial Estate

Bintan is located 50km southeast of Singapore. The willingness of Indonesian authorities to facilitate the BIE project was one of the positive spin-offs of BIP for Singapore. Singapore government agencies were able to secure a coastal site for the BIE project, and to reserve a 4,000-hectare site to be developed over a decade or more. Another indicator of this was that BIE secured duty free status, which is not extended to Bintan as a whole. BIE has an on-site integrated terminal to handle customs, immigration, quarantine and port clearance to expedite the shipment of raw materials and finished goods. More interestingly, while BIE is subject to provincial administration, it has been allocated staff from regulatory agencies to facilitate the formulaic one-stop approval process. Low land prices have enabled factory rents to be 25 to 50 per cent lower than BIP and, because of lower living costs, BIE's wage levels are also below BIP's.

BIE's initial marketing targeted textiles and garments, furniture and other wood processing activities. Of the first 11 tenants that commenced operations, eight were garment manufacturers. Garment makers had access to Singapore's export quota under the multi-fibre agreement, a concession for foreign companies that are usually excluded from Indonesia's export quota. Access to this quota has since been lost, and partly for this reason a new marketing plan for BIE was required. Electronics was added to the marketing priorities, as announced in September 1997 at a ceremony where eight electronics firms signed up for space. Subsequently, there has been a modest growth in investment, from 23 tenants in 1996 to 30 in mid-1998 (SEDB Annual Report, 1998), with a total of 33 operating and committed occupants claimed in December 1998. Of these 33 firms, 70 percent are Singapore companies (mostly garment makers) with 6 Japanese electronics firms accounting for over half the remaining occupants.

Of the 4,000 hectares available to BIE, 110 hectares had been developed at a cost of US$113 million. Compared with the ultimate workforce originally expected to be in the order of 130,000, by 1997 there were only 4,500 employed and 6,000 by mid-1998. In 1997, revised employment projections targeted a workforce of 12,000 by 2001. The project itself was scaled down to a 500-hectare development. As at June 2002, BIE has 35 tenants and 13,000 workers (Table 2A). The tenant profile is shown in Table 2B.

Even with the recent increase in occupancy, the intention to develop a 500-hectare township appears unrealistic. To begin with, the BIE project was ill-timed. BIE was launched at the same time as Singapore's other flagship projects in China and Vietnam. By then, interest had already shifted to the perceived availability of other lucrative options in these emerging markets, and the added attractions of their large domestic markets. BIE is thus faced with a 'chicken and egg' dilemma. Without the benefits of a substantial occupancy, it is difficult to attract investors, due to the limited supporting environment, but where without more occupants it is hard to improve the operating environment. For the present, BIE is neither a significant contributor to the restructuring of the Singapore economy, nor a commercially viable project (Perry and Yeoh, 2000).

Land ownership has become a major contentious issue, as land acquired by the Salim Group for joint venture projects such as BIE has come under question by regional legislators and local farmers. The financial disputes with local villagers and mob protests in Bintan have introduced further uncertainties into the long-term viability of BIE. In January 2000, an estimated 1000 villagers stormed into BIE and shut down its power generators. Although the Indonesian authorities intervened, several companies had already threatened to pull out their investments. In February 2000, the Salim Group was prosecuted for alleged illegal land appropriation. The irony is that these developments occurred just a month after

Singapore's Prime Minister Goh Chok Tong unveiled a S$1.2 billion assistance package (including a S$400 million regionalization finance scheme) for Indonesia, while leading a 60-member business delegation to Jakarta to explore investment opportunities in Indonesia.

More recently, security at BIE has been heightened following the Bali bomb blasts. An inter-ministerial ceremony (scheduled for October 18, 2002) to mark the expansion of BIE was cancelled, while prospective tenants have reportedly postponed their site visits `indefinitely'. While it is too early to assess the financial repercussions, BIE could do without the added uncertainties.

In addition, regional autonomy laws (nos. 22 and 25 of 1999) have added uncertainties to the operating environment of the two parks. Officially implemented in 2001, foreign companies now have to deal with the provincial and sub-provincial governments much more intensively than they did before. Our on-site interviews[2] with executives and tenants, at both parks, have confirmed this new development. Preliminary evidence points to a more complex regulatory environment.

The Chinese Parks

In physical design, the two industrial townships at Suzhou and Wuxi, follow the pattern of BIP and BIE. The administrative context, on the other hand, differs. In BIP and BIE, the Indonesian partner (Salim Group) is a private company whereas in China the Singapore investors worked with government agencies. Another difference is the complexity of the administrative and regularity environment in China compared with Indonesia. In Indonesia's highly centralised political system, the endorsement from senior national politicians provided a degree of administrative certainty further strengthened by their protection of the main commercial partner in the projects. In China, the projects had to contend with multiple tiers of government administration and competition within the tiers during a time of economic and political change. The motivation for the projects in China is also more diffused than in Indonesia. In the latter, the primarily concern had been to promote the restructuring of the Singapore economy, and to exploit the complementarities of neighboring economies. The Suzhou project had a political objective to demonstrate the strength of the 'Singapore development model' and its transferability to other Asian environments. Wuxi had narrower economic objectives based on the perception that Singapore agencies have an advantage in real estate development in China because of their links to western business, and access to Chinese business and political networks. The selection of Suzhou and Wuxi for the projects reflected the

[2] Interviews in BIP and BIE were conducted in July and September 2002, respectively.

draw of a province newly opened to wholly foreign-owned companies where the parks would have strong prospects of capturing a significant share of inward investments.

China-Singapore Suzhou Industrial Park (CS-SIP)

CS-SIP is Singapore's most controversial overseas township project and China's largest joint venture measured both in its total estimated project cost (US$20 billion) and land size (7,000 hectares). CS-SIP was conceived as a balanced community, home to a workforce of 360,000 and a total population of 600,000. As well as providing the full range of urban facilities for its resident population of workers, managers, administrators, expatriates and their families, it was also to be the new commercial centre for the existing city of Suzhou as well as a commercial centre serving the surrounding area. The ambition for CS-SIP reflected the goal of developing a township on a scale to test in China the effectiveness of the Singapore approach to social and economic development. This goal was encouraged by China’s former premier Deng Xiaoping who, it has been said, regarded Singapore as ‘a capitalist version of the communist dream’. In 1992, Deng promoted the idea of learning from Singapore as a way of avoiding the environment problems and social disorder that concerned him in southern China. Singapore’s Senior Minister Lee Kuan Yew took up this message, and personally took charge of the formalisation of the idea into the development of CS-SIP (Cartier, 1995). The development of CS-SIP was sanctioned by the State Council on February 11, 1994 and three landmark agreements were signed in Beijing on February 26, 1994. The Park was formally launched on May 12, 1994.

The Singapore model, as applied to CS-SIP, encompasses methods for attracting and developing the commitment of foreign companies. It also involves the delivery of social and welfare services to support an efficient and co-operative workforce and a work-orientated community. Attributes thought to attain these conditions include welfare provision (encompassing housing, medical and retirement needs) self-funded through compulsory employee and employer contributions, high quality infrastructure, strict pollution control, service reliability, ‘one stop’ non-corrupt decision-making, minimum entry or performance regulation and transparent financial charges. To bring these attributes to CS-SIP required a large-scale project to facilitate institutional innovation, autonomy from aspects of local government control and investment in administrative practice or, as it has become known, ‘software development’ (SIPAC, 1998).

CS-SIP was developed by a joint venture between a consortium of Chinese and Singapore-based investors known as the China-Singapore Suzhou Industrial Park Development Company (CSSD). The Chinese consortium had a 35 percent stake in CSSD shared amongst 12 organizations, mainly national state-owned enterprises together with Suzhou city and Jiangsu province (in which Suzhou is located) investment companies. The Singapore consortium had a 65 percent stake in CSSD shared amongst 24 organizations, mainly Singapore government-linked agencies and companies, including SEDB Investment and JTC International, as well as two organizations that also participated in other parks - SembCorp Industries and the Salim Group (through a subsidiary, KMP China Investments). The two consortia retain their separate identity and responsibilities with projects taken up by participants according to their expertise and agreed roles. The work of CSSD is overseen by a specially created local authority, the Suzhou Industrial Park Administrative Committee (SIPAC). Inter-governmental interest remains through a joint steering council co-chaired China's Vice-premier Li Lanqing and Singapore's Deputy Prime Minister Lee Hsien Loong.

CS-SIP was launched amidst great fanfare. Singapore's optimism about the project was encouraged by a series of advantages secured at the outset of the project. CS-SIP is located in Jiangsu province, which was selected in the early 1990s for accelerated economic development to offset the concentration of foreign investment in the SEZs (Yang, 1997). The township was afforded preferential policies, comparable to those in China's Special Economic Zones. Finally, its unique status as an inter-governmental development initiative was believed to add security against the political risks of investing in China.

Since the inception of CS-SIP, limits to the perceived advantages have become apparent. The significance of the inter-governmental endorsement of the project has been reduced by the influence over the project at the municipal and provincial level. SIPAC, a new local government authority set up to administer the development district, was placed under the authority of Suzhou municipality which oversees other local authorities with competing industrial estates. Direct competition is greatest with Suzhou New District, a project affiliated to the Suzhou municipal government that similarly aims to create a diversified township of modern industry, commerce and housing (The Straits Times, May 14, 1999).

The development of the New District commenced prior to CS-SIP, and it continues to be favoured for commercial and housing development as well as by foreign investors. It has advantages in lower labor costs, proximity to the airport and its adaptation of CS-SIP's 'one-stop service' model. It claims to process business licence applications in 10 working days matching CS-SIP, somewhat reducing the impact of its software investment. Another institutional innovation copied in the New District was the establishment of a 'green lane' to enable import clearance in the district rather than at the trans-shipment port. Moreover, the province's wealth means that there are comparatively high standards of infrastructure and environmental control throughout the province. This reduces the scope for CS-SIP to differentiate itself through its physical design and management.

By mid-1998, it was claimed that projects with a total potential value of US$3.4 billion had been attracted, including 88 manufacturing operations with an average project value of US$30 million (SEDB, 1998). While the value of manufacturing investment had been close to target, the overall rate of progress of the project did not meet Singapore's expectations especially with respect to residential and commercial development. The extent of Singaporean disappointment was indicated by Senior Minister Lee Kuan Yew's public questioning of the commitment of the Chinese partners to the project (The Straits Times, 5 December 1997).

Singapore's frustration has been greatest over the limited progress of housing and commercial projects. At the end of 1998, there were only around 1,000 residents in the township and a total workforce of 6,000. The slow rate of development represented a financial loss to the Singapore consortium, which had principally funded the initial land development and infrastructure facilities. As well, there were costs faced by Singaporean investors, in executive housing, retail and other services, who were drawn to the township in expectation of the project's rapid development. Singaporean investors reportedly lost US$77 million over seven years of operations. Significantly, there is also a political cost in the suggestion that Singapore was naive in perceiving that it would obtain a special status in China (The Economist, January 3, 1998).

In June 1999, acrimony with the Suzhou municipal authorities finally culminated in an announcement that Singapore would reduce its involvement in the project, and transfer majority ownership of CS-SIP to the Chinese consortium from 2001 (The Straits Times, 30 June, 1999). CS-SIP had, by then, attracted 133 projects. More than 91 international firms had started operations and 14,000 jobs created. These investments have provided a basis from which the township should grow. In January 2001, the Singapore consortium reduced its stake in CS-SIP to 35%.

Interestingly, investments began to pour in thereafter. By August 2002, the park had attracted 395 investment projects worth over US$12.4 billion and created employment for 44,000 workers (Table 3). The park has since become a foreign investment hub, with foreign enterprises linked to Fortune 500 companies. CSSD has plans to be listed by 2004 as well as to build an international standards high-tech park. Plans are in the pipeline for the completion of the second and third phase of the main transport network and basic infrastructure development within the park.

Wuxi-Singapore Industrial Park (WSIP)

WSIP is a real estate development without the broader diplomatic objectives of CS-SIP. It has the potential to cover up to 10 km^2 making it a smaller project than CS-SIP. It is also less ambitious in being instigated as a real estate development without the political overtones of CS-SIP. Development of WSIP commenced in 1994, with the official opening of the administration building in 1996. The park is located in the Jiangsu Province, 130 km away from Shanghai and 80 km northwest of Suzhou. Wuxi has an urban population of 4.3 million population, with a per capita income of around US$2000 which is one of the highest amongst Chinese cities. The park was designated a national high technology development zone as part of the Torch Program initiated in 1988. This status defined its focus on electronics and electrical, computer and computer peripherals, control systems and instrumentation, precision engineering, telecommunications components, medical and healthcare products, automotive and aerospace components, and supporting industries.

The basic taxation incentives available to foreign investors match those in CS-SIP, including the possibility of a total of 5 years of corporate tax exemption followed by 5 years of reduced tax. WSIP was designed for wholly foreign-owned investments and like CS-SIP, there has been an emphasis on instigating a ‘one stop’ administrative service to manage approvals and documentation in setting up a new enterprise. The park is situated on the edge of Wuxi’s urban district with service facilities, dormitory accommodation and an executive village incorporated into its design.

WSIP markets itself based on its strategic location, quality service management, and its first-rate infrastructure, telecommunications and transportation networks. The park was originally a 70 percent Singapore-owned joint venture with the remaining 30 percent taken up by Wuxi’s municipal government. The Singapore consortium was led by SembCorp Industries (SCI), with the other principal investors being Temasek Holdings (the Singapore government’s main investment holding company) and the Salim/KMP Group. Wuxi municipal authority holds interests in other industrial estates, but Singapore officials downplayed the direct competition as only WSIP was designed exclusively for wholly foreign-owned ventures.

In contrast to the multiple parties involved in CS-SIP, the Wuxi municipality was the sole Chinese partner involved in the project. Lower land costs were a further advantage and unlike CS-SIP, WSIP was negotiated directly with the Wuxi authorities and this direct involvement minimized the polarization between higher echelons of the Chinese government and the provincial government.

WSIP's original key investors were mainly MNCs with operations in Singapore, including Siemens Components, Seagate Technology, Sumitomo Electric and Matsushita Refrigeration. SEDB's assistance in bringing the first tenants to the park has been acknowledged. Nonetheless, the total investments attracted were below that CS-SIP. Notwithstanding WSIP's focus on high-tech companies, the investment profile is relatively low value-added, with a large share of Asian investments.

From a total of US$450 million investment committed in 1996 and 6,000 jobs at the end of 1996, investor interest has slowed. Immediate prospects for growth are focused on the possible expansion of the initial investors. Higher taxation and duties on imported capital equipment, introduced in 1996, have been a challenge to maintaining investor interest in the types of technology-intensive activities that the park is designed for. Concessions in this taxation regime were introduced in 1998, but this benefit has been overtaken by the uncertainties arising from Asia's economic crisis.

Exports from WSIP were valued at US$1 billion in 2001 and employment stood at 16,000. WSIP has since been developed to its second phase, covering an area of 235 hectares. However, economic viability has yet to be achieved. The park had been operating at a loss since its inauguration. WSIP incurred losses of S$3.8 million and S$4.3 million in 1998 and 1999, respectively, and only managed to trim its losses to S$2.8 million in 2000. In mid-2002, the SCI-led consortium signed an agreement to pare its stake to 49 percent with effect from 2003. This transfer of shareholding and management control would, according SCI officials, result in better "alignment of interests and improve the operating efficiency of the park" (The Straits Times, May 14, 2002). SCI has provided for an extraordinary loss of S$48.3 million for its loans to the park.

Interestingly, and not unlike CS-SIP, the Chinese partners have recently announced plans to develop the third phase of the project, which will double WSIP's size. It is envisaged that, by granting the Chinese a larger interest in WSIP, the park's performance will turn around in 2002. Suffice to say, even though WSIP has not experienced difficulties with the local bureaucracy to the extent of CS-SIP, the handing over to Chinese management mirrors the outcome of CS-SIP.

Singapore's Industrial Townships: Some Reflections

The progress of Singapore's overseas parks over a comparatively short period of time indicates the ability of the city-state to mobilise its economic and political resources. Since the early 1990s, through these projects, Singapore has developed an area equivalent to around 20 per cent of the industrial land area managed by the state's industrial land developer within Singapore. The projects have obtained special investment conditions within their overseas localities, and government endorsements further underline their significance**.** Nonetheless, as most openly admitted, substantial challenges remain in securing their long-term financial viability. Of the four projects reviewed, only BIP has established itself as a viable industrial park, but without delivering the broader goals associated with the regionalization initiative.

In the case of Indonesia[3], the rationale for these projects seem to have over estimated the attractiveness of low cost production environments for multinational companies (Yeoh, et al., 2000). BIP has increasingly become a Japanese investment enclave, with linked Singapore support industries. And in BIE, Japan similarly provides the main source of non-Singaporean investment. This concentration partly reflects the Japanese's strategy of taking greater interest in developing regional markets and expending its use as an export base, as compared to North American and European companies (Hatch and Yamamura, 1998). This is compatible with the low cost production environments of the type offered by BIP and BIE. American and European investors have been concerned that the predominantly young, migrate female workforce, subject to behavioural controls and isolated dormitory living, may result in a home country consumer backlash.

In the case of China, the projects were expected to benefit from the ability of Singapore's Chinese elites to obtain a special status through their ethnic allegiance and dual connections to overseas Chinese and western business networks. The experience in Suzhou indicates that while there is an interest in learning from Singapore, local officials prefer to deal directly with foreign investors. This outcome accords with the assessment of outside observers that China tends increasingly not to view overseas Chinese as preferred investors or joint venture partners.

Hong Kong's reversion to China has given it direct access to overseas capital independent of overseas Chinese networks. Also, it is suggested that mainland China may perceive a political advantage in avoiding close linkages with overseas Chinese. The diffusion of images such as 'Greater China', and transnational coalitions of ethnic Chinese with expansionist ambitions, suggest that relations with western governments may be best managed by remaining separate from other Chinese communities (Harding, 1995).

[3] The onset of Asia's financial turmoil has added to the challenges facing the Indonesia parks, but there are reasons to suggest that it is not their source (for a more detailed discussion, see Perry and Yeoh, 2000).

For projects in both countries, the reliance on personal ties rather than transparent contracts has had its advantages and disadvantages. In the case of the Indonesian projects, reliance on the Salim Group was necessary in the context of the Indonesian system of 'crony capitalism' fostered by then President Suharto (Hill, 1996). The end of the Suharto era, and pressure from the IMF and western governments for financial transparency, has not immediately severed Salim's political or commercial influence. Salim has, however, been forced to commence a major restructuring to stem financial losses and to search for new avenues of investment outside Indonesia (The Straits Times, April 24, 2001). A longer-term uncertainty remains associated with the perceived weaknesses in the political leadership, and the continued resentment of Chinese-owned businesses amongst segments of Indonesian *pribumi* community (Godement, 1998). In the Suzhou experiment, the limits of relying on personal ties have been most immediately encountered, where inter-government endorsement at the top proved insufficient to secure equal commitment in the lower tiers of government. Thus, despite claims about Singapore's politicians having achieved a special 'guanxi' (relationship) with China to secure the project's success, when Singapore announced its reduced involvement in CS-SIP, Suzhou's mayor nonchalantly pointed to the cultural divide between Singapore and China:

> *"In our cooperation in the past five years, that we have an MOU to solve our problems is because of the cultural differences in the two countries, and the different understanding of the items in the documents …"*
>
> *- Chen Deming (quoted in The Straits Times, June 30, 1999).*

Conclusion

The comparative success of the industrial parks in Indonesia and China is difficult to judge because each faced different challenges and had different opportunities. Evaluative judgments are also complicated by the mix of economic and diplomatic goals underlying the projects. In terms of meeting the immediate investment goals, BIP has most claim to success (Table 3). This project had the benefit of commencing at a point when the Singapore economy was growing strongly, and many of the city-state's larger foreign MNCs were seeking new, low cost production locations. The proximity to Singapore was an advantage in providing management economies in overseeing the new factories, sharing resources with Singapore operations and providing access to the city state's logistic support. The critical role of the Singapore government in providing a secure, well-managed industrial site is indicated by the low take up of other, and more favorably, located industrial land on Batam. This suggests that geographical proximity is not in itself the draw card. As well, the project had the advantage of a comparatively simple administrative context. It was brokered between the leaders of two governments, without risk from lower tier governments or dependency on larger cross-border arrangements.

BIP is now a well-established real estate project, but has not necessarily achieved all its development goals. It has been a springboard for Singapore-Indonesian co-operation in Riau, but it is not yet clear that Singapore has obtained the resource benefits it looked for. BIP may be at risk from the breakdown of the township as a separate enclave, and the larger social tensions existing on Batam. The BIE project has faced low investor interest, arising both from the increased competition for foreign investment and the restricted appeal of its operating conditions. Over the longer term, the political uncertainties and policy nuances that radiate from Jakarta are unlikely to add to investor confidence.

WSIP has been affected by changes in the regulation of capital equipment imports by foreign investors, reducing the viability of technology-intensive manufacturing for which the project is configured. The CS-SIP project has attracted a high level of foreign investment, fulfilling the intended niche of accommodating high-value projects from investors that are most at risk from administrative uncertainties. CS-SIP's problems stem from the lack of priority obtained from its local development partners, many of whom are involved in competing developments or are seeking to promote Suzhou as a whole, and not just CS-SIP. In retrospect, CS-SIP has experienced greater challenges as the `model' was subjected to various, often incongruous, objectives thus setting the stage for conflicts of interest and discontentment (China Online, October 7, 1999).

Singapore's regionalization program, which follows an earlier and largely unsuccessful internationalization initiative, has yet to bring to Singapore the economic benefits intended. For the present, Singapore's overseas industrial parks remain as investment enclaves within a disjointed economic and policy environment. They are linked to networks of transnational investment, business elites and specific government commitments rather than an overall deepening of regional integration. The positive aspect of this is that the parks remain sites of investment privilege, in respect of their regulatory controls, infrastructure quality and status with public and private agencies. The weakness is that privileges obtained are vulnerable to changes in political allegiances, and the infrastructure efficiency is at risk from the uncontrolled external environment.

Finally, it should be recognised that, while the initial optimism with which the R2000 projects were unveiled has not been justified, official commitment to the projects remains (The Straits Times, July 2, 1999), as is the acceptance of an extended time horizon to meet development targets. As long as these projects maintain some ongoing momentum, a judgement of failure or success may not be appropriate given their mixed economic and political objectives.

References

Batam Industrial Development Authority (1991). *Batam Development Data.*

Brown, C. (1998), Overseas Chinese Business in South-East Asia, in K. Sheridan (ed), *Emerging Economic Systems in Asia*. Sydney: Allen & Unwin.

Cartier, C. (1995). Singaporean Investment in China: Installing the Singapore Model in Suzhou, *Chinese Environment and Development*, 6(1&2), pp. 117-144.

China Online. (1999, October 7). *Singapore-Suzhou Industrial Park: Lessons Learnt*.

Godement, F. (1998). *The Downsizing of Asia.* London: Routledge.

Grundy-Warr, C., Peachy, K. and Perry, M. (1999). Fragmented Integration in the Singapore-Indonesian Border Zone: Southeast Asia's 'Growth Triangle' Against the Global Economy, *International Journal of Urban and Regional Research*, 23 (2), pp. 304-328.

Harding, J. (1995). The Concept of Greater China: Themes, Variations and Reservations. In D. Shambaugh (ed), *Greater China: The Next Superpower?* , pp. 8-34. Oxford: Oxford University Press.

Hatch, W. and Yamamura, K. (1996). *Asia in Japan's Embrace.* Cambridge: Cambridge University Press.

Hill, H. (1996). *The Indonesian Economy Since 1966*. Cambridge: Cambridge University Press.

Ho, K.C. and So, A. (1997), Semi-Periphery and Borderland Integration: Singapore and Hong Kong Experiences, *Political Geography*, 16(3), pp. 241-59.

Kanai, T. (1993). Singapore's New Focus on Regional Business Expansion, *NRI Quarterly*, 2(3), pp. 18-41.

Kumar, S. and Siddique, S. (1994). Beyond Economic Reality: New Thoughts on the Growth Triangle. In *Southeast Asian Affairs 1994*. Singapore: Institute Of Southeast Asian Studies.

Kwok, K.W. (1996). Singapore: Consolidating the New Political Economy. In: *Southeast Asian Affairs 1995*, pp. 291-308. Singapore: Institute of Southeast Asian Studies.

Parsonage, J. (1992), Southeast Asia's "Growth Triangle": A Sub-Regional Response to Global Transformation, *International Journal of Urban and Regional Research*, 16(2), pp. 307-317.

Peachey, K..,Perry, M. and Grundy-Warr, C. (1998). The Riau Islands and Economic Cooperation in the Singapore-Indonesian Border Zone, *Boundary and Territory Briefing,* 2(3).

Perry, M. (1991). The Singapore Growth Triangle: State, Capital and Labor at A New Frontier in the World Economy, *Singapore Journal of Tropical Geography*, 12(2), pp. 138--151.

______ (1995). New Corporate Structures, Regional Offices and Singapore's New Economic Directions, *Singapore Journal of Tropical Geography*, 16(2), pp. 181-196.

______ and Yeoh, C. (2000), Asia's Transborder Industrialization and Singapore's Overseas Industrial Parks, *Regional Studies*, 4(2), pp. 199-206.

Redding, G. (1990). *The Spirit of Chinese Capitalism.* Berlin: de Gruyter.

Regnier, P. (1991). *Singapore: City State in South East Asia*. London: Hurst & Company.

Rodan, G. (1989). *The Political Economy of Singapore's Industrialization.* London: Macmillan.

Server, O. (1996). Corruption: Some Evidence from Indonesia*, Habitat International,* 20, pp.23-41.

Singapore Economic Development Board (1993, May). *Singapore Investment News, Regionalisation Supplement.*

________ (1994). *Economic Development Board Yearbook 1993-1994.*

________ (1995). *Singapore Unlimited.*

________ (1998) *Annual Report.*

Singapore Ministry of Finance (1993). *Report of the Committee to Promote Enterprise Overseas.*

SIPAC (1998). *China-Singapore Suzhou Industrial Park Facts and Figures.*

Tan, C.H. (1995). *Venturing Overseas: Singapore's External Wing*. Singapore: McGraw-Hill.

The Business Times (2001, August 28). *IBRA Offers to Sell 3 Salim Assets in Batam, Bintan and Karimun.*

The Economist (1998, January 3). *TheTrouble with Singapore's Clone.*

The Straits Times (1997, December 5). *SM Lee Unhappy Over Suzhou Park Progress*.

_______ (1999, May 14). *Suzhou Park Plagued by Rivalry*.

_______ (1999, June 30). *The Suzhou Experiment*.

_______ (1999, July 2). *Regionalization `Will Continue'*.

_______ (2001, January 19), *SIP Set to Rake in $13m Profits This Year*.

_______ (2001, 24 April). *Riau Businessmen Eyeing Salim Assets.*

_______ (2001, October 6), *Migrants: A `Big Headache'* for Batam.

_______ (2002, May 14). *SCI-led Group Cedes Control of Wuxi Park*.

Toh, M.H. and Low, L. (1993). *Regional Cooperation and Growth Triangles in ASEAN*. Singapore: Times Academic Press.

Yang, D.L. (1997). *Beyond Beijing: Liberalization And The Regions In China*. London: Routledge.

Yeoh, C., Goh, M., Lau, G.T. and Richardson, J. (1992). *Strategic Business Opportunities in the Growth Triangle*. Singapore: Longman.

_____ . (1993). A New Frontier in Regional Co-operation for Business Development: Insights from the Singapore-Johor-Riau Growth Triangle. In: *Proceedings of the Second World Business Congress, Managing East-West Business in Turbulent Times*, Turku, Finland, pp. 699-712.

______, Perry, M. and Lim, M.L. (2000). Profile of a Low Cost Manufacturing Enclave: The Case of Batamindo Industrial Park, Indonesia. In R. Edwards, Nyland, C. and Coulthard, M. (eds), *Readings in International Business*, pp.193-212. NSW: Pearson Education Australia.

Yeung, H. (1997). Cooperative Strategies and Chinese Business Networks. In P. Beamish and J. Killing (eds), *Cooperative Strategies: Asian Perspectives*, pp. 22-56. San Francisco: The New Lexington Press.

_______. (1998). The Political Economy of Transnational Corporations: A Study of the Regionalization of Singaporean Firms, *Political Geography*, 17(4), pp. 389-416.

Figure 1: Singapore's Overseas Industrial Parks in Indonesia (Riau) and China

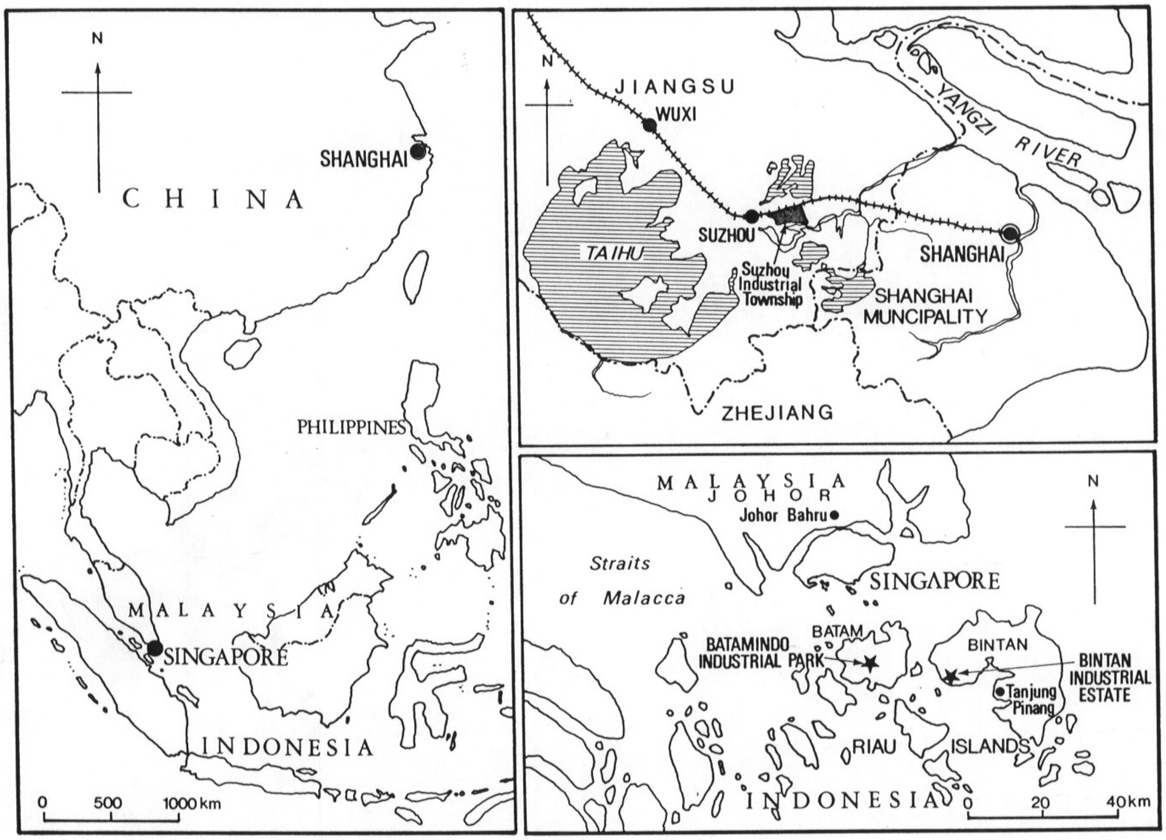
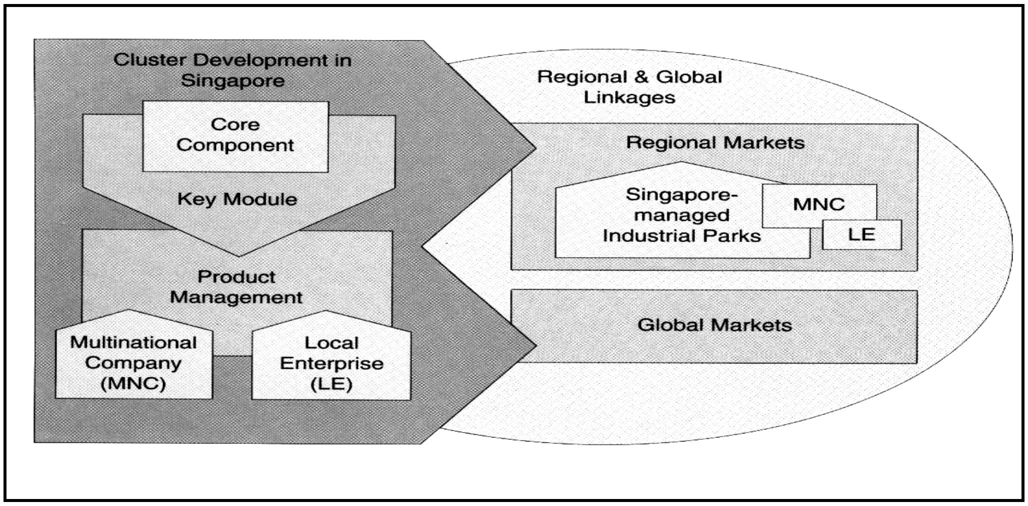


Figure 2: Transborder Industrialization



Source: Singapore Economic Development Board, Singapore Unlimited, 1995.

Table 1A: Batamindo Industrial Park - Operational Statistics (as at June 2002)

General Information	
Investment by Developer	US$ 470 million
Committed Tenants	88
Area Taken Up	560,000 m^2
Investment by Tenants	> US$1 billion
Export Value	> US$2 billion
No. of Employees	66,000

Tenants by Country of Origin			
Japan	42	Finland	1
Singapore	25	Sweden	1
USA	7	Denmark	1
Germany	3	Holland	1
France	2	Australia	2
Switzerland	2	Malaysia	1

Source: SembCorp Industries (http://www.sembcorp.com.sg).

.

Table 1B: Batamindo Industrial Park - Tenant Profile

	Electronics	Electrical	Plastic Molding	Precision Parts	Packaging	Pharmaceuticals	Medical	Support	Others	*Total*
Japan	21	8	2	7	2	1	-	-	1	42
Singapore	8	-	7	3	3	-	-	1	3	25
USA	6	-	-	-	-	-	-	-	1	7
Germany	2	1	-	-	-	-	-	-	-	3
Australia	-	-	-	-	1	1	-	-	-	2
France	1	1	-	-	-	-	-	-	-	2
Switzerland	1	-	-	-	-	1	-	-	-	2
Malaysia	-	-	1	-	-	-	-	-	-	1
Denmark	-	-	-	-	-	-	-	-	1	1
Finland	1	-	-	-	-	-	-	-	-	1
Holland	-	-	-	-	-	-	1	-	-	1
Sweden	-	1	-	-	-	-	-	-	-	1
Total	40	11	10	10	6	3	1	1	6	88

Source: Batamindo Industrial Park Fact Sheet, June 2002.

Table 2A: Bintan Industrial Estate - Operational Statistics (as at June 2002)

General Information	
Investment by Developer	US$113 million
Committed Tenants	35
Area Taken Up	104,000 m^2
Investment by Tenants	> US$105 million
Export Value	> US$283 million
No. of Employees	13,000

Workers' Profile			
Age Education Gender Marital Status	18 to 30 years Senior High (12 years of education) 80% Female; 20% Male Single	Religious Mix Labor Source	70% Muslims 22% Christians 8% Others Bintan, Batam, islands in the Riau province Java & Sumatra

Source: SembCorp Industries (http://www.sembcorp.com.sg).

.

Table 2B: Bintan Industrial Estate - Tenant Profile

	Electronics	Garment	Supporting	Precision	Precast	Total
Singapore	5	13	3	1	1	23
Japan	6	-	-	-	-	6
USA	2	-	-	-	-	2
Germany	1	-	1	-	-	2
Switzerland	1	-	-	-	-	1
Taiwan	-	1	-	-	-	1
Total	15	14	4	1	1	35

Source: Bintan Industrial Estate Fact Sheet, June 2002.

Table 3: Summary Statistics of Singapore's Industrial Parks in Indonesia and China

Batamindo Industrial Park (as at June 2002)		Bintan Industrial Estate (as at June 2002)	
Scale of project	500 ha	Scale of project (Initial plan: 4000 ha)	500 ha
Investment commitment	US$470m	Investment commitment	US$113m
No. of investors	88	No. of investors	35
Total employment	66,000	Total employment	13,000

China-Singapore Suzhou Industrial Park		Wuxi-Singapore Industrial Park	
Scale of project	7,000 ha	Scale of project	1,000 ha
Investment commitment (August 2002)	US$12.4bn	Investment commitment	US$872m
No. of investors (August 2002)	395	No. of investors (June 2002)	55
Total employment (August 2002)	44,000	Total employment (June 2002)	15,000

Sources: Singapore Economic Development Board & SembCorp Industries publications (various issues).